

Annual WATER QUALITY REPORT

Reporting Year 2013



Presented By



PWS ID#: 5610011

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2013. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Source Water Assessment

The City of Santa Paula's source water assessment was completed in September 2002, with the assistance of the California Department of Public Health (CDPH). Our source is considered most vulnerable to the following activities not associated with any detected contaminants: Sewer collection systems, wells-agricultural/irrigation, NPDES/WDR permitted discharges, automotive-body shops, machine shops, metal plating/finishing/fabricating, historic gas stations and underground storage tanks - confirmed leaking tanks.

A copy of the complete assessment may be viewed at either the CDPH Drinking Water Field Operations Branch, 1180 Eugenia Place, Suite 200, Carpinteria, CA 93013, or at the City of Santa Paula, Public Works Water Division, 180 South Palm Avenue, Santa Paula, CA 93060. You may request that a summary of the assessment be sent to you by contacting Jeff Densmore, District Engineer, at (805) 566-1326.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Community Participation

The City of Santa Paula Water System is managed as an enterprise function by the City of Santa Paula. The Water Operation and Water Distribution Divisions of the Public Works Department conduct operations. Comments about the water system can be forwarded to the City Council, which meets on the first and third Monday evenings of each month at 6:30 p.m., in the City Council Chambers, 970 Ventura Street, Santa Paula, California.

Where Does My Water Come From?

The City of Santa Paula's source water is 100% groundwater, pumped from the Santa Paula Basin. The basin is made up of hundreds of feet of sands and gravels deposited in the Santa Clara Valley and the mouth of the Santa Paula Canyon, which contains millions of gallons of water between the sand and gravel particles. The Santa Paula Basin extends from the Hallock Drive area on the east to the Wells Road area on the west.

The City of Santa Paula owns and operates five deep wells: Well 1-B, Well 11, Well 12, Well 13, and Well 14. With these five wells, the water system can produce up to 10.6 million gallons of potable water per day.

The City operates two water conditioning facilities: the Well 12 Water Conditioning Facility and the Steckel Water Conditioning Facility. Both facilities remove iron and manganese from the water. Although neither iron nor manganese is a health concern, water containing high levels of iron will look rusty, and stain fixtures and laundry. Similarly, water with high levels of manganese will contain black particles that may stain laundry and fixtures and plug appliance screens. The Well 12 Water Conditioning Facility treats water produced by Well 12. The Steckel Water Conditioning Facility treats water produced from Wells 11, 13, and 14.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Sam Hutton, Chief Water Operator, at (805) 933-4282.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include: **Microbial Contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; **Inorganic Contaminants**, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; **Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and that can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems; **Radioactive Contaminants**, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Any UCMR3 detections are shown in the data tables in this report. Contact us for more information on this program.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2013	1	0.6	0.003	0–0.18	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2013	10	0.004	0.1	0.0–6	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2013	1	2	0.022	0.0164–0.0357	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Cadmium (ppb)	2013	5	0.04	0.2	0.0–1.4	No	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chlorine (ppm)	2013	[4.0 (as Cl2)]	[4 (as Cl2)]	0.86	0.27–1.22	No	Drinking water disinfectant added for treatment
Chromium (ppb)	2013	50	(100)	0.3	0.0–4.0	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2013	2.0	1	0.4	0.3–0.6	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2010	15	(0)	5.6	4.5–6.1	No	Erosion of natural deposits
Haloacetic Acids–Stage 2 (ppb)	2013	60	NA	0.8	0.0–2.0	No	By-product of drinking water disinfection
Nickel (ppb)	2013	100	12	0.2	0.0–4.0	No	Erosion of natural deposits; discharge from metal factories
Nitrate [as nitrate] (ppm)	2013	45	45	10.6	1.4–24.4	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 226 (pCi/L)	2010	5	0.05	0.1	0.1–0.3	No	Erosion of natural deposits
Selenium (ppb)	2013	50	30	5.4	2.0–20	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2013	80	NA	7.4	3.1–13.6	No	By-product of drinking water disinfection
Uranium (pCi/L)	2010	20	0.43	4.2	3.0–5.3	No	Erosion of natural deposits
Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2013	1.3	0.3	0.367	0/37	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2013	15	0.2	2.9	0/37	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	EXCEEDANCE	TYPICAL SOURCE
Chloride (ppm)	2013	500	NS	47.1	41–57	No	Runoff/leaching from natural deposits; seawater influence
Copper (ppm)	2013	1.0	NS	0.0012	0.0–0.07	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron ² (ppb)	2013	300	NS	54.8	0.0–3320	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2013	50	NS	235.5	110–330	Yes ³	Leaching from natural deposits
Specific Conductance (µS/cm)	2013	1,600	NS	1,329.2	1,170–1,430	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2013	500	NS	207.7	0.0–500	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2013	1,000	NS	692.5	450–1,030	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2013	5	NS	0.3	0.0–15.2	No	Soil runoff
Zinc (ppm)	2013	5.0	NS	0.0013	0.0–0.08	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Boron (ppb)	2013	522.5	400.0–600.0
Calcium (ppm)	2013	106.1	0.0–171.0
Chlorate ¹ (ppb)	2013	162	92–240
Hardness [as CaCO₃] (ppm)	2013	552.1	446.0–604.0
Hardness (grains/gal)	2013	32.3	26.1–35.3
Magnesium (ppm)	2013	41.2	32.0–43.0
Molybdenum ¹ (ppb)	2013	10.53	9.7–12
Potassium (ppm)	2013	4.3	3.0–5.0
Sodium (ppm)	2013	96.4	83.0–105.0
Strontium ¹ (ppb)	2013	1,091.7	950–1,200
Vanadium ¹ (ppb)	2013	1.4	1.4–1.4

¹ UCMR3 results.

² the high level of iron was due to samples taken after a well rehabilitation project. The iron level has subsequently dropped below the detection limit” Any water entering the system after the project was processed through our iron and manganese removal facility prior to delivery.

³ Manganese was detected in Santa Paula’s source water supply at levels exceeding the established state secondary MCL (SMCL), which are set to protect against unpleasant aesthetic effects such as color, taste, odor, and staining of plumbing fixtures (for example, tubs or sinks) or clothing during laundering. There are no adverse health effects expected with this exceedance. In 2013, 94.5 percent of the water served was treated at our two iron and manganese removal facilities prior to delivery. The remaining 5.5 percent, which was from Well 1-B, was used to meet peak demands during summer months.

Definitions

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

grains/gal (grains per gallon): Grains of compound per gallon of water.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).